

### REMARKS

Claims 1 to 20 are pending in this application, of which claims 1, 8, and 16 are independent. Favorable reconsideration and further examination are respectfully requested.

All of the claims remain rejected over U.S. Patent No. 5,339,275 (Hyatt). As shown above, the claims have been amended. In particular, the independent claims have been amended to specify connections among the claimed components that are not believed to be disclosed or suggested by the applied Hyatt patent.

In this regard, the Office Action equates circuit 996 of “Fig. 9”<sup>1</sup> to the claimed control circuit and, apparently, the circuit of Fig. 5 to the claimed forward and feedback paths. In particular, col. 19, lines 35 to 43, which are referenced at page 3 of the Office Action, refer to Fig. 5. With respect to the circuitry of Fig. 5 and “Fig. 9”, we initially note that the application contains Figs. 9A to 9T, not “Fig. 9”. We could not find specifically how the circuitry of Fig. 5 fits with “Fig. 9”, except insofar as it is described with respect to Fig. 12B. In this regard, Hyatt states

Still further, the adaptive analog refresh arrangement discussed with reference to FIGS. 9F to 9T herein using reference signals can be used with the reverberation unit discussed with reference to FIG. 5 herein to improve precision and capability.<sup>2</sup>

The circuits shown in FIG. 12B will now be discussed for the embodiment of the reverberation unit of FIG. 5, wherein input signal 504 (FIG. 5) may be the same as analog input signal AI 504 (FIG. 12B) and output signal 507 (FIG. 5) may be the same as analog output signal 507 (FIG. 12B) and wherein register 501 (FIG. 5) may include CCD memory 932, refresh circuit 996, and the other circuitry [sic] shown in FIG. 12B. In a preferred embodiment, the analog refresh arrangement of the present invention may be used with the reverberation circuit of FIG. 5 as shown in FIG. 12B. For simplicity of discussion, it will be assumed that clock 943 is a one MHz clock, that CCD memory 932 is a 100 stage shift register, and that analog input AI 504 is sampled and output sample 507 is generated for each recirculation of CCD memory 932; yielding

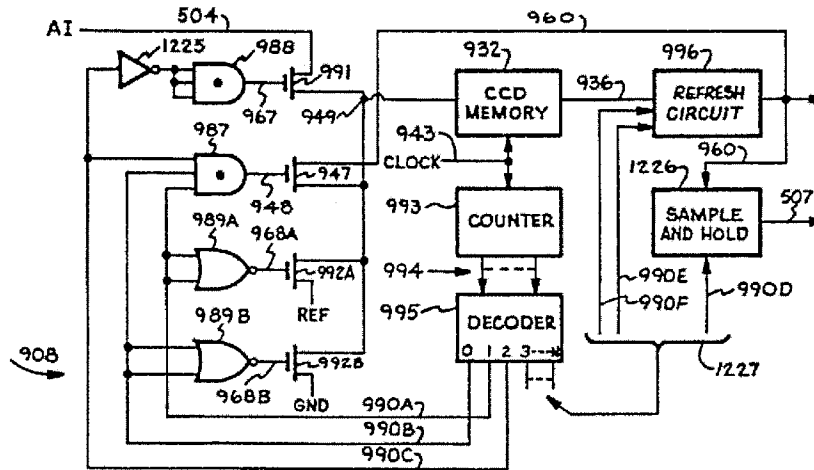
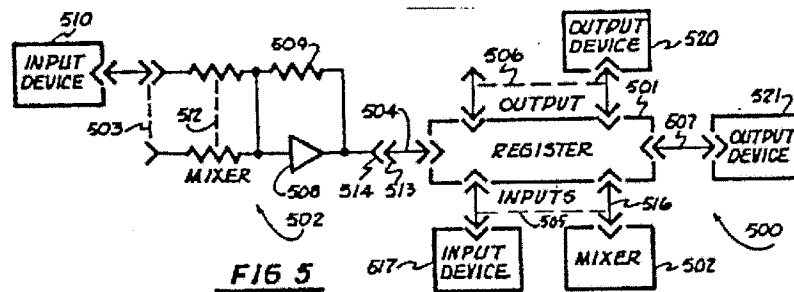
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<sup>1</sup> Office Action, page 2

<sup>2</sup> Col. 20, lines 1 to 5

an input and output rate of 10 KHz. This is based upon one input and output sample every 100 clock pulses, which is once per recirculation of CCD memory 932.<sup>3</sup> (emphasis added)

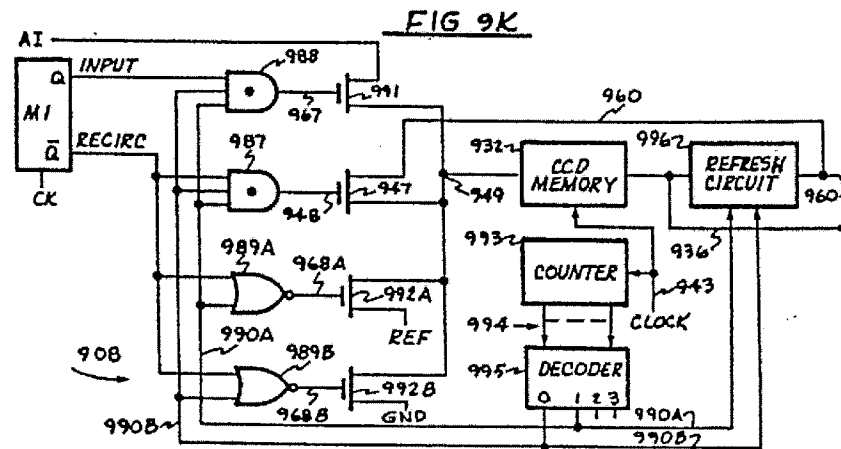
Figs. 5 and 12 of Hyatt are reproduced below for illustration.



**FIG 12B**

It is assumed that, since figures such as 9K (below) show circuitry similar to Fig. 12B, that the connections described with respect to Fig. 5 would be similar.

<sup>3</sup> Col. 104, line 59 to col. 105, line 9



Thus, we assume (although our assumption may be incorrect) that register 501 of Fig. 5 may include refresh circuit 996 (the alleged counterpart to the claimed control circuit). Assuming that these are the connections alluded to in the Office Action, we do not see how or why the claimed detector or sensor would fit into this circuitry.

In this regard, the Office Action alleges that the transducer mentioned at col. 116, lines 56 to 61 corresponds to the claimed sensor. That portion of Hyatt is reproduced below:

The term signal is herein intended to include electrical signals, charge signals, current signals, acoustic signals, illumination signals, magnetostrictive signals, sonic signals, magnetic signals, and other known signals which may be sensed such as with a transducer and which may be processed such as with a filter.

This portion of Hyatt merely describes how the word “signal” is defined. It is not describing the transducer itself, much less how such a transducer would fit in connection with the remaining circuitry described in Hyatt (much less the circuitry of Figs. 5, 9K or 12B) or how that transducer would operate. Moreover, we do not see any disclosure or suggestion to incorporate such a transducer, as suggested in the Office Action.

Furthermore, the Office Action equates detectors 643 and 645 to the claimed detector. With respect to the detectors, Hyatt states “[d]igital detector circuits 643 and 645 have been discussed as digital detectors with reference to FIG. 6D.”<sup>4</sup> However, nowhere are these detectors shown, much less are they described to perform the claimed function, namely “obtain an intermediate signal from the forward path between the input and the output”. In fact, Fig. 6D is a flowchart showing a computer subroutine, not a sensor that could be in the forward path or in the feedback path, as claimed. Consequently, we do not understand there to be any disclosure or suggestion to incorporate detectors into the circuitry of Figs. 5, 9K or 12B in the manner claimed.

For at least the foregoing reasons, claim 1 is believed to be patentable over Hyatt. Independent claims 8 and 16 are likewise believed to be patentable.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In view of the foregoing remarks, the entire application is now believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

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<sup>4</sup> Col. 82, lines 34 to 36.

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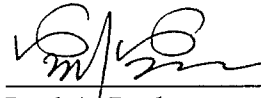
Attorney's Docket No.: 14603-013US1  
Client Ref: P2002,0800USN

Please apply any deficiency in fees or credit any overpayment to deposit  
account 06-1050, referencing Attorney Docket No. 14603-013US1.

Respectfully submitted,

Date: \_\_\_\_\_

*Jun 24, 2009*



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